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108. A composition according to claim 98 wherein
  - (a) the matrix material comprises chemical compounds which will undergo reaction together to form a polyisocyanurate, and
  - (b) the catalytic ingredient is a metal-containing compound which is a catalyst for said reaction.

109. A composition according to claim 108 wherein the polymeric ingredient is a side chain crystalline polymer.

A clean copy of the amended claims is attached.

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#### REMARKS

#### THE AMENDMENTS

The amendments to the specification are substantially the same as those made in the parent application. The amendments to Pages 9 and 17 correct errors noted by the Examiner in the parent application. The amendments to Page 9 insert further information about the conventional way in which the values of  $T_o$  and  $T_p$  are measured. The amendments to page 10 insert the conventional meanings of the terms "unsaturated polyester" and "vinyl ester".

The Table below summarizes the salient features of the six independent claims in the claims as amended by this Preliminary Amendment (and, in the hope that it will assist the Examiner, of the allowed claims of the parent application). From this Table, it will be seen that all the claims in this divisional application, like the allowed claims in the parent application, are limited to the use of modifying agents which are in the form of particles which

are distributed in the matrix material,  
have an average size of less than 150 micron,  
contain an active ingredient which is a catalyst for a chemical reaction of the matrix material, and

when heated above  $T_p$  undergo a physical change which increases the contact between the matrix material and the catalytic moiety and causes the chemical reaction to take place.

Claim 1 does not specify the nature of the bond between the polymeric moiety and the catalytic moiety, and thus covers modifying agents in which the bond may be either chemical or physical. Claims 30,54,73 and 92 specify that there is a bond having a strength of at least 10 Kcal/mole between the polymeric moiety and the catalytic moiety. Claim 95 is limited to modifying agents in which the bond between the polymeric moiety and the catalytic moiety is physical, but not chemical. Claims 1 and 95 contain a limitation that some of the active chemical moieties are on the surface of particles and the other active chemical moieties are hidden within the particles. This limitation has been inserted in order to ensure that the claims are clearly distinguished from latent catalyst in which of the catalyst is completely surrounded and encapsulated by a protective polymeric layer. No such limitation is needed in the other independent claims, in view of their requirement that there is a bond having a strength of at least 10 Kcal/mole between the moieties.

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CLAIM NO.	MATRIX	MODIFYING AGENT			
		Particles	Bond	Polymer Ingredient.	Active Ingredient
77 in parent	precursors for crosslinked thermoset polyester resin	< 150	>10 Kcal/mole	SCC, H>20 $\Delta T < 10$ and $< T_p^{0.7}$	Any catalyst
239 in parent	precursors for any crosslinked thermoset resin	0.1-50	>10 Kcal/mole	SCC, H>20 $\Delta T < T_p^{0.7}$ $T_p < 85^\circ C.$	Transition metal catalyst
1 in div'l	any	< 150	chemical or physical **	any polymer in which $\Delta T < T_p^{0.7}$	any catalyst
30 in div'l	any	< 150	>10 Kcal/mole	any polymer in which $\Delta T < T_p^{0.7}$	any catalyst
54 in div'l	precursors for crosslinked thermoset epoxy resin	< 150	>10 Kcal/mole	SCC, H>20, $\Delta T < 10$ and $< T_p^{0.7}$	any catalyst
73 in div'l	precursors for crosslinked thermoset polyurethane resin	< 150	>10 Kcal/mole	SCC, H>20, $\Delta T < 10$ and $< T_p^{0.7}$	any catalyst
92 in div'l	precursors for any crosslinked thermoset resin	0.1-50	covalent >10 Kcal/mole	SCC, H>20 $\Delta T < T_p^{0.7}$ $T_p < 85^\circ C.$	amine catalyst
95 in div'l	any	< 150	physical, not chemical **	any polymer in which $\Delta T < T_p^{0.7}$	any catalyst

\*\*Claim 1 includes, and claim 95 is limited to, modifying agents in which the bond between the polymeric moiety and the active chemical moiety is physical, not chemical. These claims require that some of the active chemical moieties are on the surface of particles, and the other active chemical moieties are hidden within the particles.

It is noted for the record that the restriction of the claims in this application has been made in order to expedite the prosecution of this application, and that Applicants intend to prosecute other claims of broad scope in one or more divisional applications.

The allowed claims in the parent application were initially rejected over Stewart, Scott and Encyclopedia, but then allowed. As discussed in detail in the parent application, there is no disclosure in Stewart of any SCC polymer having a catalytic moiety bonded thereto, and Stewart cannot properly be combined with Scott or Encyclopedia to make good this deficiency in Stewart. Like the allowed claims in the parent application, amended independent claims 54, 73 and 92 of this application are limited to polymeric moieties which are SCC polymers. Amended independent claims 1,

30 and 95 of this application are not limited to SCC polymers, but are limited to crystalline polymers having a sharp melting point such that  $(T_p - T_o)$  is less than  $T_p 0.7$ . Since Stewart likewise fails to disclose any other polymer having a catalytic moiety bonded thereto, it is submitted that each of the independent claims in this application is patentable over the prior art for the same reasons as the claims allowed in the parent application.

It is also noted

- (1) that independent amended claim 1 of this application is substantially the same as a combination of the allowed claim 1 of Serial No. 08/710, 161, and the allowed claim 5 of Serial No. 08/726,739, except that
  - (a) amended claim 1 of this application is broader than each of those allowed claims in specifying that the particle size is < 150 micron, rather than 0.1-150 micron , and
  - (b) amended claim 1 of this application is narrower than each of those allowed claims in requiring that some of the active chemical moieties are on the surface of the particles and the other active chemical moieties are hidden within the particles;
- (2) that independent claim 30 in this application is substantially the same as allowed claim 14 in Serial No. 08/726,739, except that it specifies that the particle size is < 150 micron, rather than 0.1-150 micron;
- (3) that independent claim 54 of this application is substantially the same as allowed claim 140 of Serial No. 08/726,739, except that it specifies that the particle size is < 150 micron, rather than 0.1-150 micron;
- (4) that independent claim 73 of this application is substantially the same as allowed claim 156 in Serial No. 08/726,739, except that it specifies that the particle size is < 150 micron, rather than 0.1-150 micron;
- (5) that amended claim 92 of this application is wholly within the scope of amended claim 1 of this application; and

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(6) that independent claim 95 of this application is substantially the same as allowed claim 1 of Serial No. 08/710,161, except that it specifies that the particle size is < 150 micron, rather than 0.1-150 micron.

DISCLOSURE STATEMENT

A Disclosure Statement under 37 CFR 1.56 accompanies this Preliminary Amendment

CONCLUSION

It is believed that this application is now in condition for allowance, and such action at an early date is earnestly requested. If, however, there are any outstanding points that could be usefully discussed by telephone, the Examiner is asked to call the undersigned.

Respectfully submitted,



T.H.P. Richardson

Registration No. 28,805

Tel. No. (650) 854 6304